

## ABSTRACT

A process for forming a transistor having a gate width of less than 70 nm is disclosed herein. The process includes E-beam radiation a gate patterned on a photoresist layer, trimming the gate patterned on the photoresist layer, and 5 etching the gate patterned on the photoresist layer to a polysilicon layer disposed below the photoresist layer. The gate pattern is E-beam eradiated by an electron beam.